Executive Order VR-205-B
VST Phase II EVR System with Hirt Thermal Oxidizer

Exhibit 3
Performance Standards and Specifications

Part I - VST Manufacturing Performance Standards and Specifications

The VST Phase II EVR System and all components shall be manufactured in compliance with the performance standards and specifications in CP-201 (amended May 25, 2006), as well as the requirements specified in this Executive Order. All components (Exhibit 1) shall be manufactured as certified; no change to the equipment, parts, design, materials or manufacturing process shall be made unless approved in writing by the Executive Officer or Executive Officer delegate. Unless specified in Exhibit 2 or in the ***ARB Approved Installation, Operation and Maintenance Manual***, the requirements of this section apply to the manufacturing process and are not appropriate for determining the compliance status of a gasoline dispensing facility.

1. NOZZLES

Every nozzle shall be tested at the factory. Every nozzle shall have affixed to it a card or label stating the performance specifications listed below, and a statement that the nozzle was tested to, and met, the following specifications.

a. The nozzle vapor valve leak rate shall not exceed 0.07 cubic feet per hour (CFH) at a pressure of +2 inches water column (WC) when tested in accordance with the latest version of TP-201.2B.

b. The nozzle automatic shut off feature is tested at all service clip settings as well as handheld in accordance with Underwriters Laboratories (UL) Standard 842.

c. The nozzle's primary and secondary shut-off mechanism shall be identical to the design that passed the California Department of Food and Agriculture Division of Measurement Standards Article 2 (DMS 6-6-97).

d. The nozzle is manufactured to the specifications that passed all tests conducted during the ARB certification for the following:

TP-201.2C	- Spillage from Phase II Systems
TP-201.2D	- Post Fueling Drips from Nozzles
TP-201.2E	- Gasoline Liquid Retention and Spitting in Nozzles and Hoses
TP-201.2J	- Nozzle Pressure Drop

e. The nozzle vapor collection boot is manufactured such that the force necessary to compress the nozzle bellows 0.5 inches is in the range of 10-16 pounds force.

f. The terminal end of each nozzle shall be manufactured in accordance with the specifications referenced in Section 4.7.3 of CP-201.

2. COAXIAL HOSES

a. Every coaxial hose is tested for continuity and pressure tests in accordance with UL Standard 330.

b. Every coaxial hose is manufactured to the standards and specifications that passed all tests conducted during the ARB certification for the following:

Exhibit 5 - Liquid Removal Test Procedure (for curb hoses)
TP-201.2J - Hose Pressure Drop (for curb and whip hoses)

3. BREAKAWAY COUPLINGS

a. Every breakaway coupling is tested for continuity and pressure tests in accordance with UL Standard 567.

b. Every breakaway coupling is manufactured to the standard that passed all tests conducted during the ARB certification for the following:

TP-201.2J - Breakaway Pressure Drop

Part II - Hirt Manufacturing Performance Standards and Specifications

The Hirt VCS 100 thermal oxidizer and all components shall be manufactured in compliance with the performance standards and specifications in CP-201 (amended May 25, 2006), as well as the requirements specified in this Executive Order. All components (Exhibit 1) shall be manufactured as certified; no change to the equipment, parts, design, materials or manufacturing process shall be made unless approved in writing by the Executive Officer or Executive Officer delegate. Unless specified in Exhibit 2 or in the ***ARB Approved Installation, Operation and Maintenance Manual***, the requirements of this section apply to the manufacturing process and are not appropriate for determining the compliance status of a gasoline dispensing facility.

1. HIRT VCS 100 THERMAL OXIDIZER

a. The VCS 100 processor is subjected to an assembly quality check.

b. The VCS 100 processor is visually inspected to verify identification, caution/warning, electrical, and other Agency labels are in place.

c. The VCS 100 processor is subjected to vacuum and pressure leak tests.

d. The VCS 100 processor is subjected to the following functional tests:

i. Power test;
ii. Verify set point of vacuum sensor switch;
iii. Verify operation of main vapor valve;
iv. Verify flow rate of pilot and main vapor valves; and
v. Dielectric test.